REMARKS

Claims 1, 3-5, 7-20, and 42 to 46 are pending and have been finally rejected in the Office Action of December 17, 2002. Claims 1, 11, 42, and 46 have been amended to place the claims in condition for allowance. Entry of these amendments are requested, since they merely clarify the invention and reduce 112 issues.

Rejection of Claims 1, 3, 5, 7-20 and 42-46 Under 35 U.S.C. § 112:

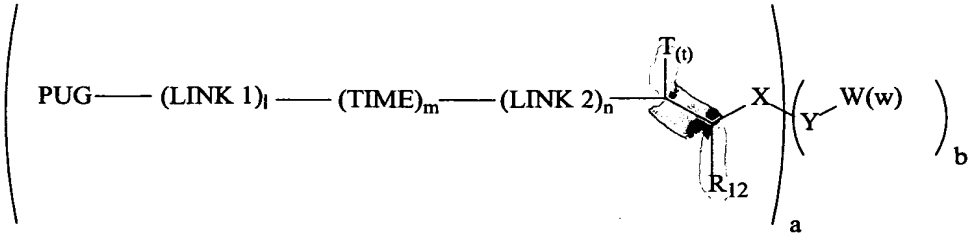
Claims 1, 3-5, 7-20, 42-46 have been rejected under 35 USC § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, has possession of the claimed invention.

The Examination states that the specification as originally filed fails to provide support for the language "in which ring the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond" in claims 1, 11, 42 and 46. This language raises the issue of new matter. The Examiner notes that applicants urge that the claims are amended to more particularly and clearly define the invention such that, in the claimed invention, when structure R_{12} and T combined to form a ring, the two carbon atoms to which T and R_{12} are, respectively, attached remains linked by a single bond. Applicants have argued that this is consistent with the original disclosure in which all the compounds meet this limitation, which is necessary in order for the blocked compounds to decompose by 1, 2 elimination mechanism to release a photographically useful group on the thermal activation. In other words, the single bond between the two carbon atoms, shown in structure I between Link 2 and the X group, remain as shown in the structure I in the claims, i.e., the single bond does not change to aromatic bond as a result of any substitution or linking groups. Applicants have stated that this particular single bond is the key characteristic of the blocked compounds of the claimed invention and is important to unblocking mechanism and associated and consequent properties of the blocked compound of the present invention.

The Examiner, however, states that these arguments are not persuasive. First, the specification as originally filed fails to clearly differentiate

between the ring forming by T and R_{12} which limits that the compound associated therewith is bound by a single bond when R_{12} and T(t) forms a ring. Second, the specification fails to disclose whether the single bond which links the two carbons to which R_{12} and T(t) associated therewith does not change to an aromatic ring as the results of any substitution or the linking group or the single bond is not part of the ring such as aromatic ring. Third, the photographically useful group may be released from the Link or Time group associated the compound, rather than the single bond linking T(t) and R_{12}.

Applicants have amended claim 1 to delete the phrase "in which ring the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond." However, it is submitted that this is inherent in the claimed structure. The claims state that "R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} and T can form a ring." *This language is intended to describe the substituents, not to change the unambiguous given structure.* In other words, this language is not a process limitation in which R_{12} is reacted with T, such that the single bonds clearly and unambiguously shown in the structure are changed. The structure, in fact, shows that the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond. Further, not only are the bonds highlighted in yellow single bonds, but the key bond shown below highlighted in green is also a single bond. This key bond is necessary in order for the blocked compounds to decompose by 1, 2 elimination mechanism to release a photographically useful group on the thermal activation, as stated in the original disclosure.



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It is respectfully submitted that the Examiner cannot rewrite Applicants' structure by changing these three clearly shown single bonds to double bonds (or aromatic bonds) to obtain the structure in the prior art (Sato). This is because the language describing T and R_{12} apply only to T and R_{12} but does positively not change anything else clearly shown as given in the structure. Such givens cannot be changed by a chemical reaction or process that is part of the claims. Thus, the language describing T and R_{12} is not an instruction to react T and R_{12} to form a new product, to change bonds in the structure, but merely describes the substituents T and R_{12}. In this case, they can be separate substituents or they can be in the form of a ring, i.e., connected to each other.

Rejection of Claims 1, 3-5, 7-10, 11-12, 14-20 and 42-46 Under 35 U.S.C. §102(b):

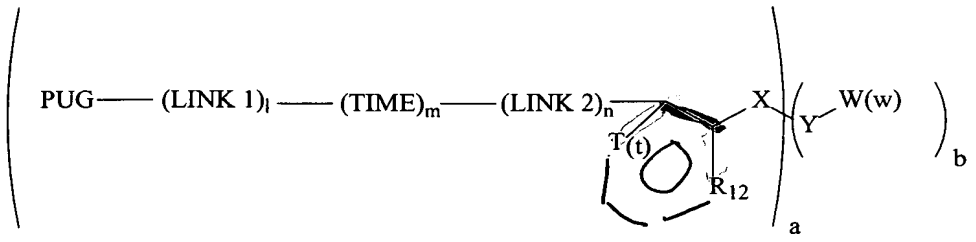
Claims 1, 3-5, 7-10, 11-12, 14-20, 42-46 have been rejected under 35 USC § 102(b) as anticipated by or, in the alternative, under 35 USC § 103(a) as obvious over Sato et al (Sato)

Sato discloses a heat developable photosensitive material containing a compound encompasses the scope of that of the present claimed invention. The Examiner notes the compound (Z) in column 2 and the exemplified compounds in columns 5-8 which contains an aromatic compound substituted with electron withdrawing group such as halogen group or CN group. The Examiner states that the compound of the present claimed invention encompasses the cope of the compound of Sato when $T_{(t)}$ and R_{12} forms an aromatic groups. Therefore, the invention as claimed lacks novelty, and alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to from a developer within the scope taught by Sato with an expectation of achieving a material which has excellent preservability before use and provides color image having high image density and a low fog density.

The Examiner states that Applicant's arguments filed September 24, 2002 have been fully considered but they are not persuasive since the single bond such as presented in the claims still read on the single bond of the aromatic ring taught in Sato et al.

The Examiner states the claims would be allowable if cancel the language such as "R12 can combine with T to form a ring" and newly amended language associated therewith.

It is respectfully submitted that the present claims do not cover an aromatic ring formed as shown below, for the reasons stated above.



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Thus, the highlighted bonds can not be changed to aromatic or double bonds. Furthermore, Sato does not remotely suggest the compounds of claim 46 in which a is 2.

In view of the foregoing amendments and remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner believe any remaining issues may be resolved via a telephone interview, the Examiner is encouraged to contact Applicants' representative at the number below to discuss such issues.

Respectfully submitted,

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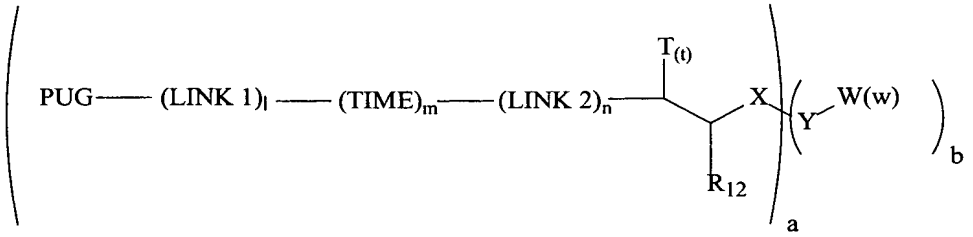
Version With Markings To Show Changes Made

In the Claims:

Please amend Claims 1, 11, 42, and 46 as set forth below:

-- 1. (Fifthly Amended) A photographic or photothermographic imaging element comprising an imaging layer having associated therewith a compound of Structure I:



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wherein:

PUG is a photographically useful group;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

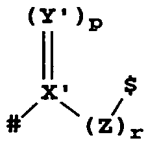
W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R_{12} to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form a bicyclic substituent;

R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} ~~can combine~~and ~~with~~ T can~~to~~ form a ring~~, in which ring the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond~~;

T is a substituted or unsubstituted alkyl, cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

X is divalent, a is 1 or 2, and b is 1;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X' represents carbon or sulfur;

Y' represents oxygen, sulfur or N-R_1, where R_1 is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

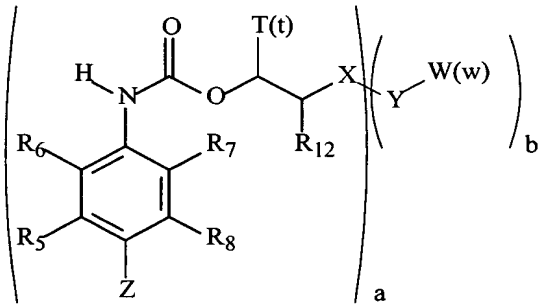
# denotes the bond to PUG (for LINK 1) or TIME (for LINK 2):

$ denotes the bond to TIME (for LINK 1) or $T_{(t)}$ substituted carbon (for LINK 2); and

wherein PUG is a development inhibitor, bleach accelerator, bleach inhibitor, inhibitor releasing developer, dye precursor, developing agent, silver ion

fixing agent, electron transfer agent, silver halide solvent, silver halide complexing agent, reductone, image toner, pre-processing or post-processing image stabilizer, nucleator, or precursor thereof.

11. (Fifthly Amended) A photographic, photothermographic, or thermographic imaging element comprising an imaging layer having associated therewith a compound of Structure III:



III

wherein:

Z is OH or NR_2R_3, where R_2 and R_3 are independently hydrogen or a substituted or unsubstituted alkyl group or R_2 and R_3 are connected to form a ring;

R_5, R_6, R_7, and R_8 are independently hydrogen, halogen, hydroxy, amino, alkoxy, carbonamido, sulfonamido, alkylsulfonamido or alkyl, or R_5 can connect with R_3 or R_6 and/or R_8 can connect to R_2 or R_7 to form a ring;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group, t is 1 or 2, when t is 2, the two T groups can combine to form a ring;

R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} ~~can combine~~and ~~with~~ T or W ~~to~~can form a ring~~, in which ring the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond~~;

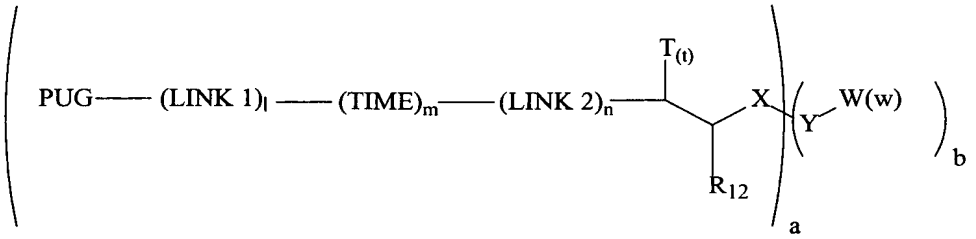
X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

Y is C, N, O or S;

X is divalent, a is 1 or 2, and b is 1;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form a bicyclic substituent.

42. (Thrice Amended) A photographic, photothermographic, or thermographic imaging element comprising an imaging layer having associated therewith a compound of Structure I:



I

wherein:

PUG is a developing agent;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R_{12} to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups

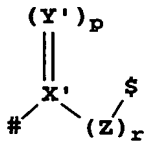
can combine to form a ring or three W groups can combine to form a bicyclic substituent;

R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} ~~can combine with~~ and T ~~t~~cano~~~~ form a ring~~, in which ring the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond~~;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

X is divalent, a is 1 or 2, and b is 1;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X represents carbon or sulfur;

Y represents oxygen, sulfur or N-R_1, where R_1 is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

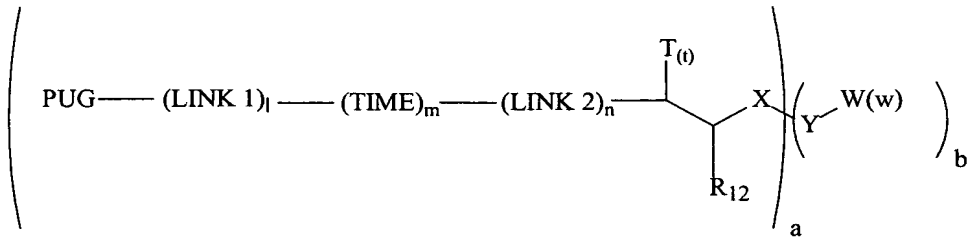
r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

# denotes the bond to PUG (for LINK 1) or TIME (for LINK 2):

$ denotes the bond to TIME (for LINK 1) or $T_{(t)}$ substituted carbon (for LINK 2). --

46. A photographic, photothermographic, or thermographic imaging element comprising an imaging layer having associated therewith a compound of Structure I:



I

wherein:

PUG is a developing agent;

LINK 1 and LINK 2 are linking groups;

TIME is a timing group;

l is 0 or 1;

m is 0, 1, or 2;

n is 0 or 1;

Y is C, N, O or S;

X is a substituted or unsubstituted aryl group or an electron-withdrawing group;

W is hydrogen, halogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group, or W can combine with T or R_{12} to form a ring, w is 0 to 3 when Y is C, w is 0-2 when Y is N, and w is 0-1 when Y is O or S, when w is 2, the two W groups can combine to form a ring, and when w is 3, two W groups can combine to form a ring or three W groups can combine to form a bicyclic substituent;

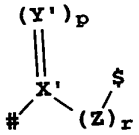
R_{12} is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R_{12} and~~can combine with~~ T can~~to~~ form a ring~~, in which ring the two carbon atoms to which T and R_{12} are, respectively, attached are linked by a single bond~~;

T is a substituted or unsubstituted alkyl cycloalkyl, aryl or six-membered heterocyclic group, t is 0, 1, or 2, with the proviso that when X is a cyano or

sulfonyl group t is 1 or 2, when t is 2 the two T groups can combine to form a ring;

X is divalent, a is 2, and b is 1;

where LINK 1 and LINK 2 is independently of Structure II:



II

wherein

X represents carbon or sulfur;

Y represents oxygen, sulfur or N-R_1, where R_1 is substituted or unsubstituted alkyl or substituted or unsubstituted aryl;

p is 1 or 2;

Z represents carbon, oxygen or sulfur;

r is 0 or 1;

with the proviso that when X is carbon, both p and r are 1, when X is sulfur, Y is oxygen, p is 2 and r is 0;

# denotes the bond to PUG (for LINK 1) or TIME (for LINK 2):

$ denotes the bond to TIME (for LINK 1) or $T_{(t)}$ substituted carbon (for LINK 2). --